

Appl. No. 10/053,767

Reply to Office Action of September 12, 2005

REMARKS

Applicants appreciate the thorough examination of the application that is reflected in the Final Office Action dated September 12, 2005, and thank the Office for withdrawing its objections to the drawings, its objections to claims 18 and 21, and its rejections of claims 4-10, 13-14 and 16-19 under 35 U.S.C. 103(a) as being unpatentable over Charrin (USPN 6,577,733 B1) in view of Hanson et al. (6,546,425 B1), its rejection of claims 11, 12 and 15 under 35 U.S.C. 103(a) as being unpatentable over Charrin (USPN 6,577,733 B1) in view of Hanson et al. (6,546,425 B1) further in view of Dale et al. (USPN 6,049,644), and its rejection of claims 20-23 under 35 U.S.C. 103(a) as being unpatentable over Creamer et al. (USPA 2003/0126584) in view of Charrin (USPN 6,577,733 B1).

To expedite prosecution of this application, Applicants amend independent claims 4, 13 and 20. Support for these amendments can be found throughout the drawings and specification, for instance, at page 2, line 17-21, page 14, lines 24-28, and page 42, line 27 of the application. To expedite prosecution of this application, Applicants also amend claim 4 to include the limitations of claims 5, 6, 10 and 11, cancel claims 5, 6, 10 and 11, and amend dependent claim 12 such that it now properly depends from amended independent claim 4. Applicants also amend claim 20 to include the limitations of claim 23 and cancel claim 23.

After entry these amendments, claims 4, 7-9, and 12-22 (15 total claims; 3 independent claims) remain pending in the application.

Applicants respectfully request reexamination and reconsideration of the application.

Oath/Declaration

Applicants note the objection and will submit a new oath or declaration, which complies with 37 CFR 1.67(a) and MPEP §§ 602.01 and 602.02, once the inventors can be contacted to complete the new oath or declaration. The assignee has been diligently attempting to contact the inventors to obtain the signatures for the new oath or declaration, but has been unable to reach one of the inventors.

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Art-Based Rejections

The Office rejects claims 4-7, 10-16 and 20-23 under 35 U.S.C. 102(e) as being anticipated by Christfort et al. (US Patent Application Publication 2002/0138617 A1), and rejected claims 8, 9 and 17-19 under 35 U.S.C. 103(a) as being unpatentable over Christfort et al. (US Patent Application Publication 2002/0138617 A1) in view of Hanson et al. (USPN 6,546, 425 B1).

Applicants submit that the cancellation of claims 5, 6, 10, 11 and 23 renders the rejections of those claims moot. With respect to claims 4, 7-9, and 12-22, Applicants respectfully traverse these rejections for at least the following reasons.

Claims 4, 7-9 and 12

Amended claim 4 relates to a method for executing a multi-channel application capable of operating over a plurality of channels in a multi-channel system having a plurality of subscribers. (Emphasis added.) This method comprises:

- identifying each subscriber with a unique identifier which is independent of a subscriber device running said multi-channel application, wherein the multi-channel application comprises a set of applications in which each application is adapted for a specific device type;

- detecting device types associated with subscriber devices, wherein each device type is configured to communicate over at least one of the channels, wherein each channel is established over a particular medium;

- translating application templates to specific markup languages associated with each of the device types;

- communicating the translated application templates to each of the subscriber devices;

- storing threads executed by each subscriber device during execution of each application, wherein each of the executed threads are stored within a particular session which is associated with each unique identifier such that upon any of the subscribers being disconnected during a session the subscriber is uniquely identified upon reconnection to the application; and

- recalling said executed threads when the subscriber reconnects to the application following the subscriber being disconnected;

- presenting to the subscriber an option to continue execution of the application from a previous point of execution prior to the subscriber being disconnected. (Emphasis added.)

Applicants respectfully submit that the Christfort et al. reference fails to disclose, for example, "the multi-channel application comprises a set of applications in which each

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application is adapted for a specific device type,” as recited in claim 4. In rejecting claim 4, the Office cites paragraph(s) [0071]-[0073] of the Christfort et al. reference which discusses that:

[0071] Host server 110 includes a middleware transformer 112 for transforming application output into output that is tailored or customized based on parameters or conditions associated with a service request. For example, the capabilities of the client devices used by end users may vary widely. According to one embodiment, the application developer designs the application to produce generic output that includes several output variations, also referred to as output segments, for presenting or displaying the output on the client device. The generic output is received by middleware transformer 112. The middleware transformer 112 also receives or detects the parameters or conditions associated with the service request. Middleware transformer 112 then selects a particular output variation or option based on the parameters or conditions of the service request.

[0073] The application used by the map service provider may therefore generate generic output that includes several variations of the requested directions, such as one output segment with text only and one with text and graphics. The application provides the generic output to middleware transformer 112, which also receives parameters or information from the request, such as data that indicates that the client device is a mobile phone. Middleware transformer 112 then selects the output segment with text only from the generic output and generates customized output that contains the text only output segment from the application, and then middleware transformer sends the customized output to the end user. In another embodiment, the application produces a comprehensive set of output that is customized or formatted by middleware transformer 112 based on a style sheet selected based on the client device. (Christfort et al. at paragraphs [0071]-[0073]; Emphasis added.)

Thus, the Christfort et al.’s reference teaches a single application and a middleware transformer 112 which filters the output from that application (i.e., selects particular output segments of that application) to produce a customized output which it sends to the end user.

Applicants submit that the Christfort et al. reference does not teach that the application comprises a set of applications. Moreover, the “customized output” of the Christfort et al. reference is not a unique application adapted for a specific device type. Rather, in the Christfort et al. reference, it is merely the output of the application that varies. As such, the Christfort et al. reference fails to teach “the multi-channel application comprises a set of

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applications in which each application is adapted for a specific device type,” as recited in claim 4. Applicants submit that the Hanson et al. reference is similarly deficient.

Applicants respectfully submit that the Christfort et al. reference also fails to disclose “translating application templates to specific markup languages associated with each of the device types,” as recited in claim 4. The Office cites paragraph(s) [0124] – [0137] of the Christfort et al. reference as allegedly teaching this limitation. Paragraph [0127] of the Christfort et al. reference discusses that:

[0127] In one embodiment, after the condition-specific output has been created, an XSL style sheet may be applied to format the output according to the needs of the client to which the output is to be sent. In an alternative embodiment, in addition to the output processing described above, the middleware transformer formats the output for the specific device, either by applying one or more XSL style sheets or by any other means. (Christfort et al. at paragraph [0127]; Emphasis added.)

Thus, the Christfort et al. reference teaches that the middleware transformer 112 generates a condition-specific output and then applies an XSL style sheet to format the output according to the needs of the client. Applicants submit that the Christfort et al. reference’s teaching of using XSL style sheets to format an output for a client is not translating application templates to specific markup languages associated with each of the device types. Nothing in the Christfort et al. reference teaches “application templates” or that application templates are translated to specific markup languages. As such, the Christfort et al. reference fails to teach “translating application templates to specific markup languages associated with each of the device types,” as recited in claim 4. Applicants submit that the Hanson et al. reference is similarly deficient.

Applicants respectfully submit that the Christfort et al. reference also fails to disclose, for example, “storing threads executed by each subscriber device during execution of each application,” as recited in claim 4. In rejecting claim 4, the Office cites paragraph(s) [0180] – [0182] of the Christfort et al. reference as allegedly teaching this limitation. Paragraph [0180] of the Christfort et al. reference discusses that:

[0180] According to yet another embodiment, the host maintains state information at an intermediary about the services accessed by an end user. For example, the intermediary may store an information stack for each session by an end user. The information stack indicates the sequence in which services or mobile modules

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have called other mobile modules during the session, as well as the identities of the module modules. (Christfort et al. at paragraph(s) [0180]; Emphasis added.)

Applicants submit that the Christfort et al. reference's teaching of state information, such as the information stack, are not threads executed by each subscriber device during execution of each application. Moreover, there is no indication in the Christfort et al reference that "each of the executed threads are stored within a particular session which is associated with each unique identifier." As such, Applicants submit the Christfort et al. reference fails to teach "storing threads executed by each subscriber device during execution of each application, wherein each of the executed threads are stored within a particular session which is associated with each unique identifier," as recited in claim 4. Applicants submit that the Hanson et al. reference is similarly deficient.

Accordingly, for at least the foregoing reasons, Applicants submit that claim 4, and its dependent claims 7-9 and 12, are patentable over the cited references. In addition, Applicants submits that many of the dependent claims 7-9 and 12 are separately patentable since the cited references fail to teach recitations present in those claims.

Claims 13-19

Amended claim 13 relates to system for running a multi-channel application capable of operating over a plurality of channels. (Emphasis added.) This system comprises:

- an application manager that is adapted to:
 - run the multi-channel application,
 - receive requests from clients to access the multi-channel application,
 - and
 - execute the multi-channel application in response to the requests, wherein the multi-channel application comprises a set of applications in which each application is adapted for a specific type of client device; and
- a presentation manager that is adapted to:
 - detect client device types associated with client requests, wherein each client device type is configured to communicate over at least one of the channels, wherein each channel is established over a particular medium, and
 - generate outputs to each of the clients, wherein the output to each client comprises the application formatted for the detected client device type. (Emphasis added.)

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For at least the reasons stated above with respect to claim 4, Applicants respectfully submit that the Christfort et al. reference fails to disclose, for example, a multi-channel application which comprises **“a set of applications in which each application is adapted for a specific type of client device,”** as recited in claim 13.

Applicants respectfully submit that the Christfort et al. reference also fails to disclose, for example, a presentation manager that is adapted to “generate outputs to each of the clients, wherein the output to each client comprises **the application formatted** for the detected client device type,” as recited in claim 13. In rejecting claim 13, the Office cites paragraph(s) [0127] of the Christfort et al. reference which is reproduced above.

Rather, the Christfort et al. reference, merely teaches that the output of a single application varies. For instance, the Christfort et al.’s reference teaches a single application and a middleware transformer 112 which filters the output from that application (i.e., selects particular output segments of that application) to produce a customized output which it sends to the end user. For instance, the Christfort et al. reference teaches that the middleware transformer 112 generates a condition-specific output and then applies an XSL style sheet to format the output according to the needs of the client. Thus, Applicants submit that the Christfort et al. reference does not teach that “the output to each client comprises **the application formatted** for the detected client device type,” as recited in claim 13. Applicants submit that the Hanson et al. reference is similarly deficient.

For at least the foregoing reasons, Applicants submit that independent claim 13, and their respective dependent claims 14-19, are also patentable over the cited references. In addition, Applicants submits that many of the dependent claims 14-19 are also separately patentable since the cited references fail to teach recitations present in those claims.

Claims 20-22

Amended claim 20 relates to system for developing, running and analyzing a multi-channel application capable of operating over a plurality of channels. (Emphasis added.) This system comprises:

- a development module which is adapted to allow a developer to visually design the multi-channel application;
- a runtime system which is adapted to operate the multi-channel application,
wherein the multi-channel application comprises a set of applications in

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which each application is adapted for a specific type of client device, wherein the runtime system comprises:

an application manager adapted to:

run the multi-channel application,

receive requests from clients to access the multi-channel application,

and

execute the multi-channel application in response to the requests; and

a presentation manager adapted to:

detect client device types associated with the client requests, wherein each client device type is configured to communicate over at least one of the channels, wherein each channel is established over a particular medium, and

output the application to each client device formatted for each of the detected client device types; and

a data mining module which is communicatively coupled to the runtime system and which is adapted to monitor client usage of the runtime system.

(Emphasis added.)

For at least the reasons stated above with respect to claim 4, Applicants respectfully submit that the Christfort et al. reference fails to disclose, for example, a multi-channel application which comprises **“a set of applications in which each application is adapted for a specific type of client device,”** as recited in claim 20.

Applicants respectfully submit that the Christfort et al. reference also fails to disclose, for example, a presentation manager adapted to **“output the application to each client device formatted for each of the detected client device types,”** as recited in claim 20. In rejecting claim 23, which is now incorporated into amended claim 20, the Office cites paragraph(s) [0163] – [0168] of the Christfort et al. reference as allegedly teaching this limitation. Paragraphs [0165] – [0168] of the Christfort et al. reference discuss that:

[0165] Service provider 4420 also includes an application 450 that is the subject of the request from client device 410 in this example. For example, application 450 may be a dining directory module that provides a listing of restaurants in a city specified by an end user via a client, such as client device 410. **Application 450 may be capable of generating several sets of output, such as output 452 and output 454, depending on the request.** For example, output 452 may be a prompt for the end user to supply the name of a city for which a listing of restaurants is desired.

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[0166] Service provider 440 also includes a database 470. For example, if application 450 is a dining directory module, database 470 may include information about restaurants in a number of cities. Upon selection of a particular city by the end user, application 450 may generate output 454 that includes a listing of restaurants in the chosen city.

[0167] Service provider 440 responds to the request received from client device 410 via service linker 432 with a generic output 480. For example, generic output may be an electronic document containing portal-to-go XML.

[0168] Generic output 480 is sent from service provider 440 to hosting service 430, where the generic output is processed by a device transformer 436. Device transformer 436 may be a server that functions as a middleware transformer by applying style sheets to generic XML output to a customized output 490, as described above. Customized output is then sent to client device 410 for display to the end user. (Christfort et al. at paragraph [0165] – [0168]; Emphasis added.)

Applicants submit that the Christfort et al. reference's teaching of an application 450 that generates several sets of output 452, 454 is not the same as outputting "the application to each client device formatted for each of the detected client device types." As such, the Christfort et al. reference fails to teach a presentation manager adapted to "output the application to each client device formatted for each of the detected client device types," as recited in claim 20. Applicants submit that the Hanson et al. reference is similarly deficient.

For at least the foregoing reasons, Applicants submit that independent claim 20, and its respective dependent claims 21-22, are also patentable over the cited references. In addition, Applicants submits that many of the dependent claims 21-22 are also separately patentable since the cited references fail to teach recitations present in those claims.

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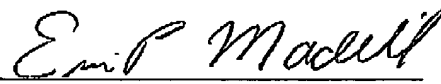
In conclusion, for at least the reasons given above, all claims now presently in the application are believed allowable and such allowance is respectfully requested. Should the Examiner have any questions or wish to further discuss this application, Applicants request that the Examiner contact the undersigned attorney at (480) 385-5060.

If for some reason Applicants have not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent abandonment on this application, please consider this as a request for an extension for the required time period and/or authorization to charge Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

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Dated: January 12, 2006

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